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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,228	04/22/2004	Yoshiyuki Odagawa	2593-0146PUS1	7126

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EXAMINER

RAZA, SAIRA B

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/829,228	ODAGAWA ET AL.	
	Examiner	Art Unit	
	Saira Raza	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-2, drawn to a rubber composition, classified in class 525, subclass 191.
 - II. Claims 3-4, drawn to a vulcanizate, classified in class 525, subclass 332.5+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an adhesive and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.
3. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Raymond Stewart on January 24, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-2. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3-4 are withdrawn

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from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 6,498,223 B2) in view of Peascoe (US 4,202,948).

10. In reference to claim 1, Sakata discloses a rubber composition, comprising:

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- a. Two kinds of unsaturated nitrile-conjugated diene-based rubbers, one of which is a high molecular weight rubber (Rubber A) whose weight average molecular weight is 30,000 or more and the other of which is a low molecular weight rubber (Rubber B) whose weight average molecular weight is less than 30,000; and
 - b. An ethylene-propylene copolymer rubber (Rubber C).
11. It is known that the weight average molecular weight (M_w) is always greater than the number average molecular weight (M_n), unless the molecular weight distribution is one. Sakata expressly discloses that for Rubber A, the M_w can be 90,000; therefore it is inherent that the corresponding M_n is less than 90,000. Sakata expressly discloses that for Rubber B, the M_w is between 1,000 and 20,000; therefore it is inherent that the corresponding M_n is in the range of 1,000 to 20,000.
12. Sakata discloses that the composition ratio of Rubbers A, B, and C are 55-80 wt % of A, 20-45 wt % of B, and about 50 wt% of C (1:25-34, 3:5-27, 4:60 to 7:26, 10:62 to 11:15, 12:17, Table 1).
13. Sakata discloses the claimed invention except for the graft copolymer (D), hence attention is directed towards the Peascoe reference. Sakata and Peascoe are analogous art because they are from the same field of endeavor, formation of rubber compositions.
14. Peascoe discloses a graft copolymer, made by graft polymerizing a resin-forming monomer onto a spine rubber copolymer. The resin-forming monomer includes styrene/acrylonitrile, and the spine rubber copolymer includes ethylene-propylene-non-conjugated diene copolymers. Wherein the weight ratio of the rubbery copolymer is 40-70 wt%. Additionally, Peascoe discloses a blend comprised of the graft copolymer and a nitrile based resin, wherein ratio of the graft copolymer (D) to the nitrile based resin is 5/95 to 38/62 (Abstract, 1:61 to 2:5, 3:41-65, 4:14-16, 4:50-61, 5:5-10, 5:26-35).

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15. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include graft copolymer of Peascoe in the rubber composition of Sakata in order to use a graft copolymer, that when present in a blend comprised of a nitrile based resin, exhibits high notched impart strength and is capable of undergoing repeated flexing in the severe hand flex test without failure. Therefore, it would have been obvious to combine Peascoe with Sakata to obtain the invention as specified in claim 1.

16. In reference to claim 2, Sakata discloses that a vulcanizing agent is present in the rubber composition, wherein the vulcanized rubber composition can be widely employed in any application involving good resistance to oils or the like (1:8-21, 12:17). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a vulcanizing agent in the rubber composition taught by the combination of Sakata and Peascoe in order to form a vulcanized rubber composition that can be widely employed in any application involving good resistance to oils.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Raza whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Technology Center 1700